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ABSTRACT

A training program for undergraduate majors in education that prepares them to teach moderately, severly, and profoundly handicapped students in the public schools is described. Responsibility for teacher training is conceived as a partnership in which the university and various public and private service agencies cooperate. The university provides academic coursework, trainee supervision, and administrative structure. Service agencies provide on-the-job training and formative program evaluation. The students in the program are taught to utilize the entire environment of the severely handicapped individual as an instructional tool. The training of skills that will enable an individual to become independent of others is emphasized. In the course of the program, students learn an understanding of human development so that what can and should be taught can be chosen accurately, and steps may be taken to promote continued learning. The ultimate responsibility of the teacher of the handicapped is seen as: (1) deciding what the child needs to learn; (2) structuring the situations that will facilitate the learning of those skills; (3) monitoring the implementation of the child's program; and (4) determining when the instructional objectives have been attained so new ones can be established. Included in this report are descriptions of both the academic and practicum components of the program. (JD)

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The Indiana University Preservice Undergraduate Program for Training Teachers of the Moderately, Severely, and Profoundly Handicapped

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INTRODUCTION

Several years ago the State of Indiana, like many other states, passed legislation requiring all school-aged handicapped children to be served by the public schools regardless of the severity of their handicapping condition(s). At the time, all existing programs for training teachers to work with retarded children in Indiana were designed to produce teachers of the mildly handicapped: nowhere was there a program designed specifically for the person who wished to work with moderately, severely, and profoundly retarded individuals (which we shall abbreviate as either "severely retarded," or severely handicapped," in this paper). Clearly, such a program had to be brought into being, and from a human perspective, the training simply had to be done well. The program to be described later in this paper was developed in response to both of these needs.

Conceptual Framework

The first and most important task was conceptual in nature. That is, the structure any new program takes is dependent entirely on the ideas held by the people who create the program, and the experiences they have had. Knowing that the program probably had to be quite different from

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[1]The order of authors in this paper is alphabetical. At this point it is impossible to separate the relative contributions of the two authors, or where the thoughts of one end and the other begins.

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the usual teacher training program, the developmental process was begun with a consideration of the role of education in the society at large.

The first task was to try to understand what the system might be capable of providing to severely handicapped individuals. Several models for providing services to severely handicapped individuals were then considered, and one was chosen as a guide to thinking. Out of these considerations grew the concept of "the good teacher," and ultimately, the preservice training program at Indiana University that is designed to produce that person.

The Place of Education in Society, or Education as a Social Tool

It is possible to look at education in many different ways, but the most important idea from the standpoint of severely handicapped individuals is the fact that education is a social tool. Its uses vary from time to time and from place to place, and the purposes for which it is used at any point in time will determine what happens to the learners who must go through the system. In this country, education has as many uses as there are educational settings. These range from simple babysitting to intensive training in complex behaviors. Typically, however, most Americans tend to see the educational system as providing "training," i.e., as a vehicle for teaching new behaviors. Eventually, however, came the realization that this is only partly true.

For the most part, the things done by schools can be classified in two major functional categories, only one of which appears to have any potential payoff for severely handicapped individuals. The first category is that of the training of behaviors in the learner. All teachers are

supposed to subscribe to the tenet that they are training their students to do things. From the point of view of the culture as a whole, however, the skills that the students are trained to exhibit tend to be largely tangential to daily adult functioning in the society. In the early school years, children are taught the three R's, which is quite applicable to adult functioning, and in later years they are taught to drive automobiles, and this too is quite relevent. In large measure, however, much of the formal training that students receive while in school has little applicability to what they do when they leave the schools. This is true at all levels in the educational system: for example, when a person is hired to do a job in a factory, little or nothing he does in his work is likely to require any of the training he got in high school, yet a high school diploma is generally required for such jobs. This is astonishing considering the fact that many people, including some of our own parents, are perfectly capable of carrying out very complicated jobs at high levels of competence without having gone past the eighth or ninth grade. Nevertheless, it is currently almost impossible to get a young man who lacks a high school diploma an apprenticeship in many of the unions of which our parents are members. Without it, he does not meet the "educational requirements."

It is nonsensical to argue that all of the "educational requirements" are necessary to adequate functioning in most jobs that people obtain after high school. Rather, these requirements function as a sort of licensing procedure that allows the person who has gone through the system to try to do a job. This is the second main function of education in our

society: to separate those who will be allowed to try to do a job from those who will not. This selection procedure is brought into play at higher levels as well: even we professionals are not exempt. That is, the training many of us received in our graduate years is quite often not representative of the jobs we are currently doing. Many of us who are presently training special education teachers, for example, graduated from programs in which we were trained to do the things that experimental psychologists do. The learning of what teachers actually do was not emphasized in these programs if, indeed, it was mentioned at all. But--properly attired in academic cap and gown, we were able to set out to do the job that was assigned to us and which we felt a need to do. We are "qualified" to do this job by virtue of the fact that we hold doctoral degrees in education. The point is that much of education simply consists of a number of hurdles which are placed in our way: those who surmount those hurdles are allowed to try to do certain jobs, and those who cannot or who do not get past the hurdles are not allowed to try.

This licensing function of the educational process could be seen as causing a terrible waste of everybody's time if it were not for the fact that it works quite well for most people. There seems to be a very high correlation between the prestige of the position, the mental ability required for most jobs and the educational requirements accompanying them (Jenson, 1969). Education's licensing function is an important and time-honored one which most of us have accepted by virtue of the fact that we have gone through the system and are now doing a job that we see as important.

It would be most inappropriate to subject severely retarded persons to the same licensing requirements to which everyone else is subjected. Realistically, severely retarded people have already been relegated to the bottom of the social heap by virtue of the fact that they are labelled as being very retarded by the time they come to the schools. Because of this, the licensing function of education is truly irrelevant in their case simply because people labelled "moderately," "severely," or "profoundly" retarded are not allowed to go through the regular educational process: they can never get licensed to do very much. Low functioning children just cannot use the licensing function of education to their advantage. The low-functioning child who gets some good out of his education is the one whose teachers have thrown away the traditional curriculum guides that emphasize academics. Most good teachers have gone off on their own, teaching according to what each of their children seems to need. Realistically, the licensing function must be downplayed, and the training function of education must be emphasized in any teacher preparation program that purports to train persons to teach severely handicapped people.

Based on the above, "the learning of skills" was taken to be the most appropriate functional basis for the structuring of the training program, i.e., it was decided to emphasize the training function of education in preparing undergraduates to teach severely handicapped individuals. The problem now became one of deciding which skills must be trained and in what manner they are best transmitted. For these decisions a good model of learner needs was required.

Functional Models of Retarded Learners

In choosing a model for structuring the training program, several views of retarded persons were considered. All but one was rejected. The reasons for rejecting the other models developed from the realization that, even though they do have trouble doing it, severely handicapped persons can learn: the most important thing for them to learn is how to become independent of other people. This is the central task for all who grow up in our culture, after all, and retarded people are like everyone else in this respect.

Wolf Wolfensberger (1973) presented a number of models that people use in dealing with persons who are labelled "retarded". These models were seen as being very relevant to the structuring of a university training program. The following is a brief review of some of the effects that thinking within the contexts of these models could have had on the structure of a training program for prospective teachers. Some of Wolfensberger's categories have been collapsed for purposes of brevity, largely because the distinctions between some of them are more relevant to human management institutions in general than they are to education in particular.

The Retarded Person as "Subhuman" or as a "Menace to Society". In Wolfensberger's thinking these are two separate models, but for the purposes of constructing a training program both were dismissed together. Should retarded persons actually be "subhuman" or "menaces to society," there would simply be no point in attempting to provide them with educational services of any kind. This view of severely retarded children and adults would cause them to be seen as being primitive, difficult to control

(and thus to teach), and incapable of developing appreciably. This would effectively remove any incentive to try to teach them anything: the simplest way to cope with subhumans and menaces to society is to lock them up and throw away the key. Cheap caretakers could be hired to hose the place down once in a while and we could simply forget that such persons exist. No educator can take such a point of view of people seriously. Anyone and everyone can be taught something, and this model was rejected as being totally unsuitable.

The Retarded Person as "Objects of Pity," "Eternal Children," or as "God's Holy Innocents." These models can appeal to liberal thought in some ways, and are much more difficult for the educator to reject as a consequence. But one or a combination of these models chosen to guide a teacher training program would have to train students to develop paternalistic attitudes. Much of the training provided would consist of teaching the students how to keep retarded children and adults from hurting themselves while attitudes of "duty," and "caring for one's neighbor" in the trainees would be developed. In all three of these models the retarded person is not to be taken seriously as a person, and indulgent attitudes toward them are seen as being correct and proper. But nobody can remain a child forever simply because it is impossible. There is a lot to be said for children and the joy that they can bring, but eventually they all get too big to sit on your lap. There are far too many adults who had been kept as children and who are no longer "cute" by the time they get to be 5'9", weigh 180 pounds, and have to shave every day. It is easy to feel sorry for people who are all grown up and still act like

children, and it is even easier to convince people that those who spend their lives caring for them are very noble. But all people must be seen for what they are even if they are retarded, and this model was rejected as being unsuitable for our program.

The Retarded Person as Being "Sick". In this model the person is seen as having some disease that causes him to be deformed: mentally, physically, or both. Usually a label can be found to make us feel as though we know something about a condition, but in the end too many severely handicapped people wind up having nothing done for them because they do not respond to whatever treatment is prescribed: cures are rare. It may be true that workers like Kephart, Doman, and Delacato, and Barsch have developed training programs that operate within this model, and that they have been able to teach some retarded people to do things that they have never done before. This means that, for some people, the medical model is taken seriously. The big problem, however, lies in the vast residue of people who never have anything happen to them because their problems are of such a nature that they do not respond to the treatments provided by the various programs that have been developed within the thinking provided by disease-entity systems. The students trained in a public university to go out into the public schools will be forced to deal with all types of problems because the public schools are now admitting any child who comes through the door. Attempting to treat causes is simply not an efficient way to go under these conditions. It probably is not the case that all causes of human problems will soon be discovered and means of destroying these causes found, and it is surely true that

educators will not develop or supervise the cures if and when they appear. Even if cures were discovered tomorrow, the people so "cured" would still have a lot of catching up to do, and in the end good teaching will still carry the load for quite some time. Therefore this model was also rejected.

The Retarded Person as a "Potentially Independent Person". Wolfensberger never explicitly specifies this as a model for human management systems, but the normalization principle dictates it. The authors of this paper, for some years, had been thinking in concert with the normalization principle, and it seemed that this model of the learner was the most useful one from the point of view of the educator. For one thing, it dictates that, until the person being taught actually achieves independence, there is always something else that must be taught. People who cannot function independently lack skills, and since we had already concluded that the teacher training program must emphasize the training of skills, this model provided us with a specification of which skills must be taught: those that will allow a person to become independent of others. None of the other models that were considered allowed such a conclusion. No matter how people are labelled, everyone must grow up some day. It may be necessary to use special programming to focus the attention of a specific person on certain facets of life, and we may have to keep at it longer and with a higher degree of intensity than is true in the case of normal people. It may also be true that the goal might never be reached in specific cases. Nevertheless, the closer a severely handicapped person can be brought to the point at which that person can exist independently, the more we will have done our job as educators. Note, in addition,

that the "curriculum guide" within the context of this model becomes human development per se; this provides (a) an end point, and (b) an ordered series of sub-objectives. The benefits of the model thus appeared to be of tremendous magnitude, and therefore, it was adopted to guide the teacher training program.

Developmental Assessment Scales

Most assessment scales used in the classroom (and thought to represent the current views of human development) are actually composed of jumbled lists of behaviors. They are inefficient because they lack organization and clarity in terms of goal setting. The reason the scales are composed of disconnected behaviors, of course, lies in the fact that the behaviors that appear in the scales are sequenced in terms of chronological time. They have nothing to serve as a conceptual organizer other than extremely loose categories, such as "perceptual-motor," "language," etc. These categories are rarely well-defined, and almost never will a statement be found describing what they mean. Motor behaviors are intermixed with behaviors such as those in the social and perceptual processing realms as if they were all one and the same; one gets the impression from reading through these scales that it is necessary to teach a child to put a pill in a bottle before he can ever learn how to read. It is easy to understand that behaviors such as these are not likely to be related; however, most developmental scales also make statements to the effect that a child draws at least part of a human figure before he learns to write. The question must be raised as to whether these behaviors are sequenced developmentally (i.e., is the first actually prerequisite to

the second) or whether they are merely coincidentally sequenced in terms of chronological time. If one is actually prerequisite to the other, how is the teacher to know? Many similar examples can be found, e.g., rhythmic activities are usually seen as being developmentally related to language (or, at least, the making of rhythmic responses is placed in the section on "language") in most developmental scales. But are the two sets of behaviors necessarily connected? That is, can a child with poor rhythmic responses learn a language? Must a teacher teach rhythmic activities as part of the sequence of language development? These questions are very relevant to the teaching of severely handicapped children, yet they are not generally being raised. Our view of human development forces us to do so.

The problem inherent in most developmental scales is twofold: (1) the goal behaviors, i.e., those behaviors required for independent functioning, have never been clearly delineated; therefore, (2) the sequences of appearance of the behaviors that are prerequisite to the goal behaviors have never been worked out and set down on paper. Until this is done, there will never be a developmental scale that is truly useful to teachers of the severely handicapped.

Accomplishing the above requires a task analysis on a massive scale. The first step is to analyze "independent living" to discover what behaviors are required, and the second step is a further analysis to discover those behaviors that are prerequisite to independent living. A note about task analysis is in order at this point.

Marc Gold states (n.d.) that there are two kinds of task analysis, content task analysis and process task analysis. The first (content task analysis) is the breaking down of the learner's task into "teachable units"; the second (process task analysis) is the breaking down of the instructor's behavior so that the technology of instruction can be specified clearly and in useful form. In making human development into a useful tool for teachers of the severely handicapped, we would be most concerned, initially, with content task analysis, i.e., we would be most interested in specifying what it is the learner must do in order to become independent.

Gold, like most proponents of task analysis, concentrates on discrete tasks, i.e., those tasks which clearly have a beginning and an end, and which are analyzable in and of themselves as "things to be taught." Thus, in addition to the famous bicycle brake, Gold and his associates have done analyses on tasks such as bed-making, milking-machine pump assembly, locking gas cap assembly, etc. We are proposing a different kind of task analysis, however: a hierarchical analysis that analyzes a major task (the goal behaviors) in order to discover the sequence of discrete tasks involved in learning the goal behavior.

The difference between discrete content task analysis and hierarchical content task analysis is a matter of form rather than function. That is, the content of a discrete task, such as that of putting on a pair of pants, can be broken down into a series of smaller units of behavior, as it is in Table 1. This particular analysis may or may not be complete at this stage, i.e., in order to discover whether an analysis is complete, we first attempt to teach from it, and then observe where the learning breaks down (if it does not proceed at a reasonable pace).

TABLE 1

Example of a Content Task Analysis for a Discrete Task: Putting on a Pair of Pants.

1. Locate Zipper
2. Grasp Pants by Zipper
3. Shake Pants so Zipper is up and Away from Body
4. Lift Pants off Ground While Holding Zipper
5. Lift One Leg
6. Put One Leg into Pants
7. Lower Leg to Ground
8. Lift Other Leg
9. Put Other Leg into Pants
10. Lower Other Leg to Ground
11. Grasp Pants by Waist Band
12. Pull Pants Upward Around Waist

If learning does break down, it will be at a specific step or steps in the task, and at those points further analysis must be done in order to break the task down into teachable units (Gold, n.d.).

We are proposing that the process of doing hierarchical content analyses would be the same as that outlined by Gold for doing discrete content analyses. That is, a behavior required for independent living would be identified and broken down into what the analyst believes are "teachable units." The units themselves would be discrete tasks, and would require the same kind of task analysis that is outlined by

Gold. If teaching from the hierarchical analysis indicates that a better specification of prerequisite behaviors is needed, the analysis would simply continue until it has reached a point at which the result could be used as a developmental checklist.

One of the authors (R.B. Dever) has completed one such sequential task analysis already, and has found that hierarchical task analysis is indeed possible. The particular analysis was done on the task of teaching English as a first language to severely handicapped and other language-handicapped children. The goal behavior was set as being the use of English question, coordinate, subordinate and passive-voice sentence patterns. The analysis predicted that before the four constructions listed above could be learned, the child must first learn the concepts of the English phrase (those of the noun and verb phrase constructions, specifically), and before he could learn the concepts of noun and verb phrase constructions, he must first learn the components of the clause (subjects, predicates, objects, complements, and adverbials), at least in rudimentary form. Checks made against developmental data gathered by others (e.g., Lee, 1974) corroborated and supported the analysis.

Another useful hierarchical analysis is found in Gallahue, Werner, and Luedke (1975). It is an analysis of the sequences required for motor behaviors such as walking. It is interesting to note that these authors discarded the traditional concepts of fine and gross motor control, and concentrated instead on the concepts of "balance," "manipulation," and "locomotion." Part of a sequence developed by Gallahue, et al., in the area of development of balance is presented in Table 2 for the sake of

providing an example.

For analyzing more complex behaviors, such as ball-throwing, for example, concepts such as balance and manipulation would be considered together. Individual hierarchical analyses of behavior can similarly be combined and recombined to yield analyses of more and more complex behaviors. Basically, however, it is a simple process that concentrates on one unit of behavior at a time. Clearly, the notion of hierarchical task analysis has great potential for the classroom teacher of the severely handicapped, It has not been used very much, however, but until it is used, developmental scales will simply continue to be presentations of random observations of temporally-connected behaviors, and not truly useful instruments for planning programs of training children with developmental disabilities.

Development at Higher Levels. There is a real problem inherent in the use of the concept of human development that is being proposed here; it lies in the fact that the higher the level of development attained by a person, the more difficult it is to specify what it is that should be taught. The easiest children to teach are those who are the youngest and lowest functioning because it is easiest to specify goal behaviors at these levels. If a child cannot walk, it is relatively easy to specify whether or not we should be teaching him to sit up, to stand, or to take his first step with support simply by observing his current behavior. If the child is sitting but not yet standing with support, we teach him to hold onto something while standing. If he can stand with support, we teach him to let go. If he can stand unaided, we have him take the first step that

TABLE 2

Hierarchical Content Task Analysis of Balance

Head & Neck Control	Trunk Control	Sitting	Standing
Holds head erect when supported Lifts chin off ground when prone			
	Raise to prone when suspended		
	Lift chest off ground		
	Rolls to side	Sit with support	
		Sit alone forearms supporting	
	Draw knees to chest and kicks out when prone Turn over-supine to prone	Sit alone erect	
	Rolls prone to supine		
			Stands with considerable support
			Stands alone with object support
			Pulls self to standing position
			Stands unsupported

Adapted from: Gallahue, D., Werner, D., & Luedke, G. A Conceptual Approach to Moving and Learning: New York: John Wiley & Sons, 1975.

will lead to another, and so forth. Unfortunately, however, little or nothing is known about the developmental sequences involved in, e.g., learning how to budget money or in learning to function in a social setting in which there is an antagonist. This problem is deeply related to the problems inherent in existing developmental scales, i.e., we have not yet begun to concentrate on defining the behaviors that constitute "independence", and as a consequence, we are not yet ready to do the task analysis required to specify the developmental sequences for instructional purposes. Therefore, the higher the level of development exhibited by a child, the more difficult it becomes to decide what to teach, and therefore, to teach it.

We believe that we can make at least an initial specification of the areas in which research is required in the study of this problem. It is important to note that the context for independent adult functioning is the culture of which that person is a part. The culture is a catalogue of stated and unstated rules which govern everyone's behavior. The word, "rule," refers to nothing more than regularly recurring behaviors exhibited in common by a group of people. The exhibition of rule behaviors depends on learning the perceptions of behavior which must be learned prior to exhibiting the behaviors across a range of environments (Olson, 1970).

Rules can be classified in two groups: those rules which govern responses to physical surroundings (e.g., gravity, inertia) and those which govern cognitive interactions (e.g., customs, laws). These can be broken down as follows:

1. Physical Independence

   A. Locomotion: the ability to get one's body from one place to another.

   B. Manipulation: the ability to place objects where you want them to go and to intercept objects in a controlled manner.

2. Cognitive Indepencence

   A. Social: the ability to extract patterns of responding to situations; included are the rules that govern how people interact with both the physical environment (e.g., what rooms to enter) and with each other (e.g., the use of a language).

   B. Physical: the ability to extract patterns in the physical environment; included are the rules that allow people to deal with physical objects (e.g., size, weight, number), and physical relationships (e.g., mental maps of places).

The above categories are deliberately expressed in broad terms. In the area of locomotion, for example, it really makes no difference whether one moves one's body by walking, by riding in a wheel chair, or by hiring someone to carry you to where you want to go. The focus of independent locomotion is to get one's body from one location to another, and to do so without recourse to a social agency. If a person can do that, he has achieved a measure of independence. The degree to which he cannot do so is the degree to which that person lacks independence. Note that knowing where to go is not a matter of physical independence, it is a matter of social independence: it requires the knowledge of cultural perceptions of the world; how it is ordered, where to move, how quickly to move, how

to avoid areas where admission is restricted or forbidden, etc. This is because social rules are those behaviors we regularly exhibit when in contact with the environment. These range across stereotyped behaviors such as salutations and going to church at ten o'clock on Sunday morning, to having a mental picture of how to get from one place to another, to what one does when the boss gets angry because one overslept and came late to work.

A severely handicapped person does not need to learn all possible behaviors in order to be independent. Without at least some skill in each of the stated areas, however, independence is impossible. The more skills that a person can exhibit in each of the areas, the less help he will require from social agencies, and the more "independent" he will actually be.

The task for educational research at this point seems to be twofold. The first involves specifying the skill areas required that will allow a severely handicapped person to exist without reliance on people from the social agencies to do those things that he is expected to do. The second requires doing hierarchical content task analyses of these skills so that they can become teachable. If this work is completed, developmental scales will become truly useful to teachers: the teacher will know how to determine what a child already knows and what he needs to know to achieve independence. Teaching would then be the structuring of the environment so that the person cannot help learning the required behavior. This, of course, brings up the topic of the role of the teacher, to which we will now turn.

Teaching

Anyone faced with structuring a teacher training program must come to grips with the question of what "teaching" is. Whatever a teacher does, after all, is what a training program must establish as its exit behaviors for the people in the program. This in turn, will determine what happens to the trainees during the course of the program. In this section, therefore, we will present what we consider "teaching" to be.

For most teachers in public education, teaching is a matter of exposing the learner to various materials and of providing motivation to learn. This is as true for high school social studies and college-level technical studies as it is for elementary-school programs that concentrate on the "three R's."

Any teacher of the severely handicapped who tries to teach in this manner is not going to get very far, however. This is because normal children seem to have an ability to accurately pick the "things to be learned" out of the environment; severely handicapped persons do not seem to have this ability. The more severely handicapped a person is, the less likely he is to demonstrate this ability. The less a person can pick out for himself, the more the teacher is required to do it for him. Teachers of the moderately, severely, and profoundly retarded must do a great deal of choosing among the skills to be learned, and a great deal of discrete task analysis. The more accurately a teacher chooses and analyses appropriate behaviors, the more that teacher will get the learner to learn. For the teacher of the severely handicapped, then, teaching does not rely on exposure and motivation, but rather, on analysis of behavior and

structuring the environment.

Methodology is extremely important to teachers of normal persons because motivational techniques usually get built into the teaching methodologies employed. For teachers of the severely handicapped, however, methodology is relatively less important. What is of great importance is the need to know the right thing to teach and to know the right moment to teach it. For teachers of the severely handicapped, teaching is truly both an art and a science: the science is the knowledge required to find out what has to be taught; the teacher of severely handicapped children is required to understand what the learner's behaviors mean in relation to human development so that a program of "things to be learned" can be developed specifically for that learner given his unique set of circumstances. The art of teaching is a matter of figuring out how to get the learner to exhibit the goal behaviors given the immediate set of circumstances. The methodology that is used to get the learner to learn is relatively unimportant; in fact, the specific teaching method being used may often change from moment-to-moment. As long as the teacher knows exactly what behaviors the learner must exhibit, however, methodology can remain as flexible as required; there are many ways to structure learning, after all, and what works for one child at one moment may not work for another child or even for the same child at another moment.

Teaching, in this sense, becomes a matter of (1) understanding human development so that the "things to be taught" can be chosen accurately; (2) analyzing the behaviors to be learned so that the teacher can understand the specific points at which learning breaks down and take steps

to promote continued learning; and (3) having a large "bag of tricks" handy that will allow the teacher to be flexible in working through the variety of situational problems that will be encountered along the way. The first is important because it is the knowledge of human development that allows the teacher to make the critical decisions as to what to teach, i.e., if the teacher is accurate in judging the learner's needs, the teaching of splinter skills will be avoided, and normal progression will be facilitated. The second step is important for the reasons pointed out by Marc Gold (n.d.), i.e., the more difficult it is for a person to acquire a task, the more the teacher must know about the task, and the more the teacher knows about the task, the fewer the prerequisites needed by the learner. The teacher simply must understand as much about the task to be performed by the learner as possible, and the less the teacher knows about the task the correspondingly less effective that teacher will be. The third part of teaching, having a bag of tricks handy is partly a matter of process task analysis as outlined by Gold (n.d.), and partly a matter of long experience. The more experience a teacher has, the greater the repertoire of techniques available to the teacher.

The actual teaching-learning act is based on two principles.

1. <u>To learn the learner must act, not be acted upon</u>. Any attempt to teach that does not involve the active participation of the learner will be ineffective. In actuality, there is no teaching; there is only learning, and it is the learner who must do the learning. The teacher can only structure the environment more or less efficiently to facilitate learning by the learner. Typically, learning is seen as the act of taking what is in

the teacher's head and somehow implanting it in the learner's. If this were actually true, learning would be a passive process, but it is not. Learning requires activity on the part of the learner. The activity may be physical or cognitive in nature, but in any case, it is the learner's activity, not the teacher's. Given the character of severe retardation, the activity involved is most likely to be physical.

2. The teacher's task is to channel the learner's activity in a productive way. This requires the teacher to be in control of the environment so that the learner will do what the teacher wants him to do, and thus learn what the teacher has decided he must learn. Therefore, the teacher must know how to organize the total environment in ways that maximize the child's potential for learning. That is, the teacher must find ways to develop interactions between the child and his environment that will be conducive to further development.

Normal children have the advantage of living in an environment that is already structured to facilitate development. Home, school, and community experiences for most children have all been programmed by the culture. Those who are a part of these settings have learned to expect the appearance of certain skills at certain times; these expectations per se generate the circumstances necessary for those skills to appear. Expectations for severely handicapped children, however, tend to be too low, too high, or distorted. In addition, severely handicapped children, because they are developmentally slow, do not get the acknowledgement from the environment given to normal children for the skills they exhibit, and as a consequence, do not discover the "things to be learned" as easily as do normal

children. The end result is that the emergence of developmentally sequential behaviors is further slowed. The teacher's task is to speed it up again by focusing on the appropriate things to be learned and thus establishing environmental expectations that facilitate learning. This is accomplished by organizing the child's total environment, not just the classroom environment.

This emphasis on organizing the environment led to the concept of the teacher as a program manager as the vehicle for organizing the training program. This concept was developed by doing a discrete task analysis of the task of "structuring the environment to facilitate the development of the learner." The result was the following model:

The Teacher as a Program Manager*: An Analysis of the Teaching Task.

A schematic diagram of the job of the program manager is presented in Figure 1. The circle on the left represents the child as he arrives in the classroom. The child at this point, has a developmental history and is able to do a certain number of things, i.e., he may be able only to breathe, or he may be able to exhibit complex skills such as interviewing for jobs. Which behaviors the child is actually capable of performing, however, is generally not known by the teacher in any great detail before the child arrives in the classroom.

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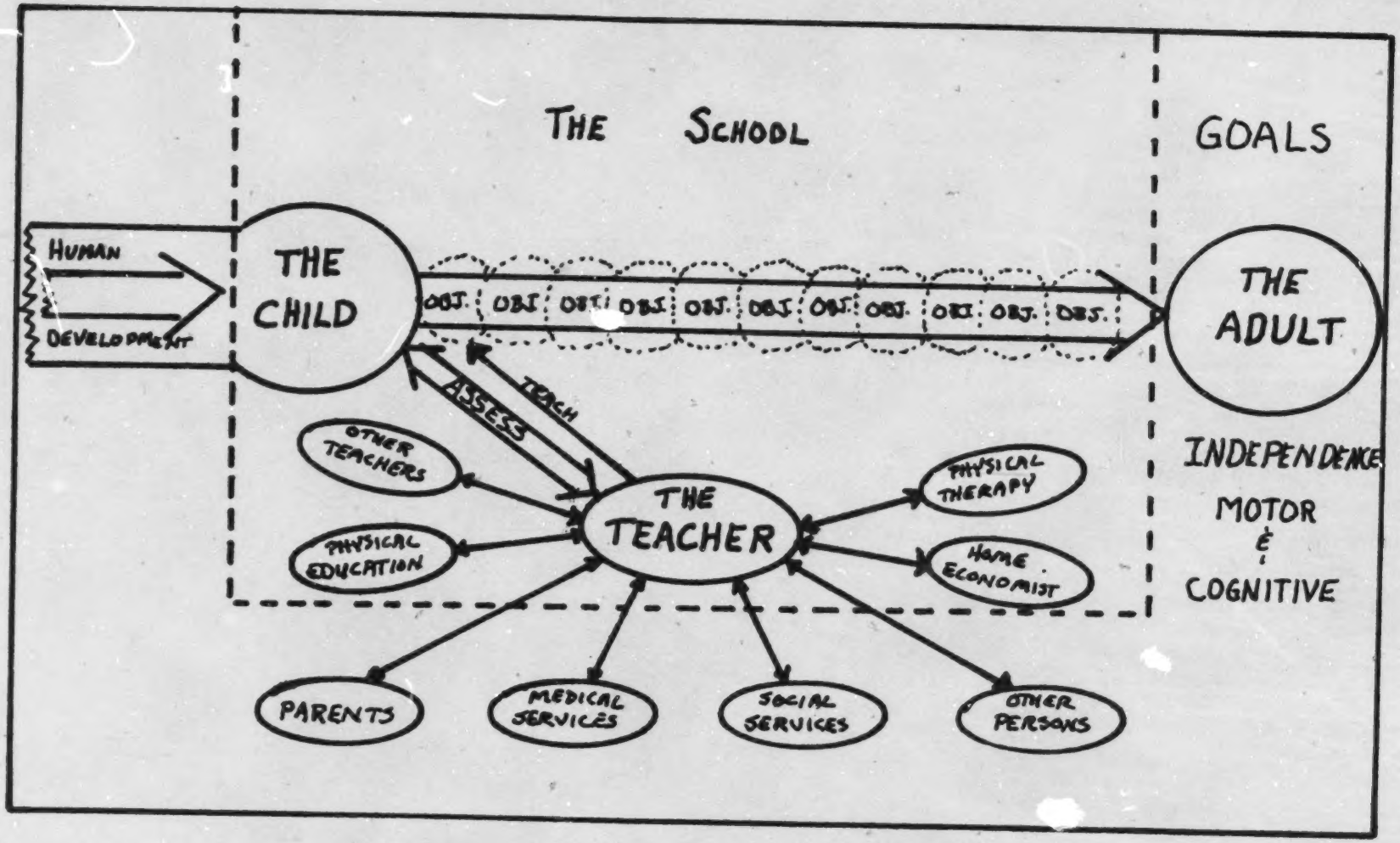
*We are indebted to Mrs. Joan Burton, Executive Director of the Stone Belt Center for Retarded Citizens, Bloomington, Indiana, for both the term and the initial idea for this concept. The concept, as it now exists, was developed by us for the purposes of structuring the training program.

THE PROGRAM MANAGER



The circle on the right represents the ultimate goal for the child, i.e., independent functioning as an adult. This level may never be reached by many severely handicapped persons, but having it as a goal will always serve as a guide for the teacher in providing "the next thing to teach."

Stretching between "the child as he arrives in the classroom" and the goal of the "independent adult" is developmental time. That is, "being an adult" consists of a set of behaviors that allow the person to function independent of social agencies. Immediately before becoming an adult, a person exhibits a set of behaviors that are prerequisite to independence; immediately before that point are another set of prerequisite behaviors, and so forth, progressing back to the stage in developmental time at which the child is currently functioning. It follows, then, that if the teacher (1) knows a great deal about the sequences of development in terms of behaviors and the sequence in which they appear, and (2) can discover which set of those behaviors the child exhibits at the present time, then that teacher should be able to structure the environment in ways that facilitate the development of those behaviors that will appear next in developmental time, and thus speed up development toward independent functioning.

The first task for the teacher when the child comes into the classroom, therefore, is to determine what things the child can do now, and to discover those things he must learn to do next which he cannot now do. That is, the teacher must assess current functioning prior to attempting to teach anything. If the teacher can accurately place the child's behavior in terms of developmental sequences, she will then be able to specify the next instructional objective to be reached. Appropriate learning

activities can then be structured, carried out, and assessed for on-going effectiveness, and new goals can be established when it has been determined that the appropriate learning has occurred.

The teacher must be able to provide activities which maximize the child's attention to a task and successful completion of the performance of that task. To provide these activities, every teacher must not only develop a "bag of tricks," she must also be willing to call on others. That is, the implementation of learning activities requires that the teacher be a successful manager and organizer not only of the classroom setting (which is severely limited in its scope and potential for learning) but also of the entire environment in which the child is, and will be, expected to function.

Even with extensive training, it would be too much to expect of any one person to know all there is to know about teaching all behaviors involved in human development. Someone must be responsible for seeing to it that the requisite teaching gets carried out, but the actual instruction can be done by someone else. The teacher who can specify objectives both within and across areas of human development will be in a position to consult with other professionals, paraprofessionals, and non-professionals who can assist in structuring individualized programs for each of the students in the classroom. If for example, one of the current needs of a child is to learn how to walk, the teacher may want to call on the adapted physical education specialist and/or the physical therapist (assuming that they are or can be made available) for help that they can provide in the assessment of current motor functioning and the structuring

of activities both within and outside of the classroom. In addition, the teacher may also have to call on the assistance of paraprofessionals and/or volunteers to carry out the activities, or on the school administration to assist in the purchase of equipment that may be required to help the child who has special needs. In short, the teacher must be able to organize the total school environment for the facilitation of the child's learning. If, for example, the child needs to learn how to interact with other children, the teacher may not only call upon the recreation specialist, but also on the cafeteria personnel, school secretaries, and the janitorial staff, etc., to see how they can help out. No matter who is involved in instruction, however, it is the teacher who has the responsibility for (1) deciding what the child needs to learn; (2) finding the requisite people in the school for the necessary assistance in structuring the situations that will facilitate the learning of those skills; (3) monitoring the implementation of the child's program; and (4) determining when the instructional objectives have been attained so that new ones can be established.

Even the ancillary professionals, paraprofessionals, and non-professionals in the school will not be able to provide enough assistance in carrying out instructional programs for most severely handicapped individuals. That is, the teacher will have to call on still others to assist in the implementation of the program(s) that she has devised. For example, the medical profession may be called upon to provide assistance in the control of seizures, or to provide the oral surgery that would facilitate the learning of self-feeding skills or vocal communication skills for a specific child. The parents may be called on to conduct portions of the

training program at home, and the social workers may be called on to assist in molding the mileau in which the child lives. In short, the entire community should, at one time or another, be involved in the instruction of the child. The teacher who is a program manager first decides what skills the child needs to develop, and then plans the circumstances that will facilitate the development of those skills. The teacher, being the person who has the greatest amount of continuous contact with the child, acts both as an instructional programmer and as a "fixed point of referral" who takes responsibility for seeing to it that the child receives any and all the help he needs in the process of becoming independent. Such a teacher is a decision-maker and organizer of a total learning environment. Such a person is a Program Manager.

Structure of the Program

The preservice training program in the area of the severely handicapped was established in April of 1973, with the first group of juniors entering the program in the fall of 1973. The structure of the program was initially provided by gathering together a group of experienced teachers of moderately, severely, and profoundly handicapped children. They were asked to specify what they thought would have been a good undergraduate program for them if they themselves had been given the chance to go through one in their preservice training. The Indiana University program resulted from these meetings. From this beginning, although modifications and adjustments have been made continuously, the program maintains the same basic structure that came out of that first set of meetings with the teachers in the field, i.e., the advice given by those teachers was excellent.

There are two major components to the program: (1) an academic component in which the students are given theory and methods for teaching moderately, severely, and profoundly retarded individuals; and (2) a practicum component, in which the students are given extensive working contact with moderately, severely, and profoundly handicapped children, youth, and adults. In practice, the practicum component of the program is seen as being the place where learning truly takes place, and therefore, the most important part of the program. For the purpose of presentation, however, the academic component will be presented first.

The Academic Component (44 semester hours)

The academic portion of the program currently consists of three groups of courses: those required by the school, those required by the department, and those required by the program. These courses are:

1. Professional Education Courses (School of Education Requirements)

F200	Introduction to Teaching	(3 hrs.)
P280	Human Development and Learning	(5 hrs.)
S485	Principles of Secondary Education	(3 hrs.)
		11 hrs.

2. Introductory Courses in Special Education (Departmental Requirements)

K205	Introduction to Exceptional Children	(3 hrs.)
K350	Introduction to Mental Retardation	(3 hrs.)
K343	Education of the Socially and Emotionally Disturbed	(3 hrs.)
		(9 hrs.)

3. Methods Courses (Program Requirements)

K481	Methods for the Trainable Mentally Retarded	(3 hrs.)
K482	Multiple Handicaps Methods	(3 hrs.)
K483	Language Assessment and Methods	(3 hrs.)
K484	Assessment of Human Development	(3 hrs.)
K485	Behavioral Management Techniques	(3 hrs.)

P447	Motor Assessment and Methods	(3 hrs.)
E339	Reading Methods	(3 hrs.)
E343	Math Methods	(3 hrs.)
		24 hrs.

Total 44 hrs.

Within the academic component, three of the courses are required by the School of Education for all preservice teachers (F200, P280, and S485). These courses are taught by School of Education staff; F200 and P280 are taken by the students during the sophomore year, as is the departmental introductory course (K205). S485 has a special section for students in the program; it presents knowledge on such issues as school structure, legal issues, etc. Most courses are taken during the students' junior and senior years, and are scheduled as follows:

	Semester I	Semester II
Junior	K350	K482
	K343	K484
	K481	P447
	E339	E343
Senior		K483
		K485
		S485
		Electives

With the exception of two of the professional education courses (F200 and P280), and the three introductory courses (K205, K350, and K343), all courses in the junior and senior years of the program are structured for and tailored to the needs of the students in the program. The courses with K48_ prefixes are taught by program personnel from the Department of Special Education or adjunct faculty from the field. Other courses are taught by personnel from other departments in the School of Education, or

from other schools in the university. The reading (E339) and math (E343) methods courses, for example, are taught by the reading and mathematics education departments in sections specifically designed for the students in the program. The course in motor assessment and methods (P447) is taught by faculty from the School of Health, Physical Education, and Recreation, and is designed, again, specifically to meet the needs of students in the program. The addition of the reading methods course is new. It was not included in previous years, but many students have been sent to student teaching assignments with teenaged prevocational moderately retarded youths who were beginning to read. Because many program graduates are also likely to run into this situation while in the field, a new course was constructed with the assistance of the reading faculty in the School of Education.

The courses with K48_ prefix were designed specifically for the group of students in the program. They existed nowhere else in the university and were seen as necessary in the preparation of teachers of the severely handicapped. The course in language (K483), for example, concentrates on the teaching of English as a <u>first</u> language; the course in methods for the multiply handicapped (K482), was created for the program and is being taught by a person who is actually teaching multiply handicapped children; the course on behavioral assessment (K484) is unlike any tests and measurements course currently being taught in the university because it concentrates on the structuring of individualized learning programs as a result of behavioral observation; standardized tests are considered only in relation to the fact that they cannot be used to structure individualized programs for severely handicapped people; the course in behavioral management (K485) is

also unique in that it is a course in how to deal with behavioral problems in people who tend not to be able to understand that they have behavioral problems.

Serious attempts are made to integrate all of the coursework with the practicum component of the program, e.g., assignments are often made for projects to be carried out on the practicum site. In order to effect this, a very close working relationship has been established between the program directors, the cooperating teachers in the various practicum sites, the academic instructors, and the practicum supervisors. At least once each year, for example, the cooperating teachers are asked to sit in a meeting with the program directors. At that time, their opinions on various aspects of the program and its conduct are solicited. During the course of the school year the same teachers are in constant contact with the practicum supervisors and have frequent informal meetings with the program directors. As a result, the cooperation from the practicum sites is excellent.

Practicum Component (26 semester hours)

The students in the program receive a great deal of practicum during the course of their program. During the junior year, the students spend 20 clock hours a week in four practicum placements, and while in the first semester of their senior year they spend 16 weeks student teaching full-time in the public schools. The distribution of practicum credits is as follows:

	Semester	
	I	II
Junior	K495 (5 hrs.)	K495 (5 hrs.)
Senior	K488 (16 hrs.)	

In the second semester of the senior year practicum is optional for the students, and each year several students elect it. In the course of the program, each student obtains at least the equivalent of a full year of guided experience.

During the junior year the students have the opportunity to work in a number of different placements under close supervision. Practicum opportunities cover large ranges in both age (CA 18 months to CA 65 years), and functional levels (moderately retarded through profoundly retarded multiply handicapped). As a junior, each student goes to four different practicum sites (eight weeks per site) which are located in preschools, public schools, sheltered workshops, and home living settings. They are required to be on site for four hours a day, five days a week. A serious attempt is made to give each student four completely different practicum placements so that they might obtain experience with a variety of age groups and functional levels before doing their student teaching. During the senior year, while student teaching, most students receive two different eight week placements, and again, an attempt is made to provide a variety of experiences. Thus, during the course of the program, a student might be given practicum experience in a preschool classroom, a school age class of moderately retarded children, a class of profoundly retarded children, and a sheltered workshop. In the senior year, the same student might have an eight-week student teaching placement in a class of primary level TMR children, and another eight-week placement in a class of pre-vocational severely retarded teenaged youth. Thus, both the range and the amount of experience given to each student is very large.

Supervision

The Indiana University training program is conceptualized as an apprenticeship approach to the training of teachers. However, the actual training violates a true apprenticeship model in two important ways: (1) since the goals of the program are externally imposed, i.e., by the university rather than the field service agency, the classroom teacher cannot totally determine the training objectives for the students placed in her classroom. Thus, the experiences programmed by the teacher may not be directed toward the individual training needs of the trainee; (2) because the cooperating teacher has, as a primary objective, the provision of services to severely handicapped individuals, she cannot continuously monitor and provide feedback to the trainee. In a true apprenticeship model, the latter two concerns would be the primary responsibility of the master craftsman, but this is not and cannot be the case in a practicum-based teacher training program. In order to tie the academic requirements of the program to the on-site practicum experiences, the program has established a supervisory structure for each of the practicum training sites.

The structure of practicum supervision entails the assignment of a faculty member or a doctoral student from the Program Committee (see below) to each practicum site. Each supervisor is responsible for visiting the site on at least a once-a-week schedule, and has at least two roles: (1) program liason; and (2) student training.

In the role of program liason, the supervisor communicates and negotiates the partnership between the training function of the university and the service provision function of the agency in which the site is found.

As particular training objectives are established for each student, the supervisor must determine whether or not it is possible to meet these objectives within the agency given the constraints surrounding that agency. In addition, the supervisor also serves as an advocate for the student in meeting the student's training needs. All requests for future placement at specific practicum sites, student and/or agency concerns, and exceptions to Program Committee and/or agency decisions are channeled directly through the supervisor. All supervisors as a group (i.e., the Program Committee) determine future practicum placements, for example.

In the training role, the supervisor plans out a course of experiences within a site that are designed to meet a student's training objectives. This planning has three major stages: (a) discovering what a student needs or wants to learn; (b) observation of the student during the course of practicum to determine whether or not training objectives are being met; and (c) providing feedback to the trainee regarding the trainee's performance. Note that the training function of the supervisor is carried out mainly through consultation: an outside supervisor can have no other impact on an agency's or student's program other than that of clarifying training and service objectives, and observing to see whether or not these objectives are being met. It is important for the supervisors to realize that, even though an agency or teacher may request assistance in developing a program for a child (or even for the agency itself), the supervisor can do no more than offer alternatives in response. These alternatives may either be accepted or rejected by the service personnel in the agency. The supervisor is little more than a transient from the agency's point of

view, and cannot assume responsibility for either the global or immediate concerns of the agency. It would be unwise to compromise this role. It is possible, for example, for an agency to request a supervisor to evaluate a teacher or the service goals of an agency. This obviously represents a conflict of interest for the supervisor, and doing it would surely jeopardize the training role played by the supervisor.

At the present time, the training function of the supervisors is programed within a clearly defined weekly schedule. Each week every student in the program is observed and individual meetings are held with both the cooperating teacher and the student. Records of each visitation are kept. These records describe student objectives, and record the observations that are made by the supervisor. Strong and weak points in the student's performance are noted and shared with both the student and cooperating teacher. Targets for the following week are set and agreed upon by all three persons involved: student, cooperating teacher, and supervisor. In addition to all of this, a weekly meeting is held with the entire group of students under the aegis of a supervisor to discuss issues and/or concerns of a general nature about the practicum sites, their general policies, the experiences of the trainees, and behavioral adaptations of the trainees within the context of the specific practicum site.

Thus, supervision, although it provides training only in an indirect manner, is a powerful training tool within the context of the program.

Selection Procedures

Given (1) the intense nature of the program; (2) the fact that the amount of financial resources allocated to the program is not large; and

(3) the fact that the number of practicum placements near the Indiana University campus are limited, only a small number of students can be taken into the program each year. The program has set a limit of 20 students per year in the program, making a maximum of 40 students in the program at any given time. In order to select such a group, a set of procedures have been instituted. They are as follows:

1. When students inquire about the program, they are informed that only students having prior successful practical experience with moderately, severely, or profoundly handicapped individuals will be taken into the program. Those who wish to enter the program must find a way to obtain such experience prior to the end of the sophomore year, when applications are considered for the following fall semester. Faculty counselling is available to suggest alternative situations which meet this requirement.

2. Students apply for the program in the spring of their sophomore year. Those with a minimum grade point average of 2.5 (required by most graduate schools for admission) are considered for admission to the program. Selection is made from the remaining pool of students on the basis of potential; this is judged by personnel in the places where the students have gained the requisite prior practical experience. This is done by ranking the applicants' letters of recommendation on a scale devised by the program directors.

3. The applicants are scheduled for an interview with a member of the Program Committee, who probes to determine if the student's professional goals can be met by the program. Many applicants are guided into other programs at this point, e.g., those who wish to work exclusively

in the area of motor development are likely to find the field of Adapted Physical Education more pertinent to their career goals.

4. The Program Committee meets to discuss each applicant, and to choose the students judged to be the top 20 applicants. Those students constitute the next junior class.

5. All applicants are notified as to the decisions of the Program Committee. An orientation meeting is held with the incoming junior class to discuss the program goals and procedures, and to outline what the students can expect to experience as members of the program.

The students who enter the program are typically well-aware of the nature of the instructional and behavioral problems that they will encounter before they enter the program, e.g., several students have come in with in excess of six years prior experience with the severely handicapped. Although not all students are this experienced, they all tend to have a very good idea of what they are getting into before they begin because of their prior experience.

The Program Committee

The Program Committee (1) guides the development of the program and (2) oversees its daily operations. It consists of the two Special Education faculty members who are the program co-directors, and three (or more) doctoral students from the Department of Special Education who are in training as teacher trainers. The doctoral students are treated as colleagues by the program directors, and each member of the Program Committee engages in the same activities. Each member of the committee, for example, supervises practicum students and student teachers, and wherever possible,

the doctoral students accompany the program directors to meetings that must take place within and outside of the university. Since all members of the Program Committee engage in the same activities, each member knows what problems exist at all times. At least once a week, and more often when necessary, the Program Committee meets to discuss the progress of each student, the problems that have arisen, and the future directions of the program. Each undergraduate student is seen at least once a week by a program committee member, and usually more often. Because of this regular contact, the problems that inevitably arise can usually be solved within a very short period of time.

Periodically, the Program Committee meets with the personnel on the practicum sites to obtain feedback on the running of the practicum, to discuss problems that have arisen, and to receive suggestions for future action. A very close working relationship has been established with the cooperating agencies as a result of this involvement, and the cooperation given to the program by the practicum sites is excellent.

Evaluation Procedures

The program is subject to continuous evaluation. Students, faculty, and practicum sites and their staff are continuously monitored for relevant program information. Most of this evaluation is used formatively for the purpose of program improvement, but beginning with the 1975-76 academic year, and the first group of employed graduates, it became possible to begin a follow-up study of program graduates. A member of the program staff has set up procedures for continuing evaluations of program graduates of successive classes. There are two parts to this evaluative

procedure: (1) program graduates are queried as to what skills they obtained from the program and what skills they did not get that they should have obtained; (2) hiring administrators are questioned as to the effectiveness of the graduates as teachers. A rating instrument was developed on the basis of an analysis of the program's training objectives. This evaluation is used to make modifications in the program to increase its effectiveness.

The Job Market

The first group of graduates has been in the field for a full year at this writing (September 1976). The group has a 100% employment record in special education, and as publicity about the program spreads, it is anticipated that the demand for program graduates will continue. Since there is only one program in Indiana preparing teachers for this specific role, and since the program must remain small, it is anticipated that there will be no saturation effect due to preparation of too many teachers.

It should also be noted that both the federal government and the State of Indiana have made the training of teachers of the moderately, severely, and profoundly handicapped a high priority area. As a result, the program is receiving and will continue to receive publicity that will serve the graduates in good stead as they go into the job market.

Because of the intense involvement of the program staff with the students in the program, letters of recommendation take on a unique character for program graduates. Each letter of recommendation is written and taken to the Program Committee for approval. Since each member of the Program Committee has professional contact with almost every student during

the course of the program, either in practicum or in student teaching sites, a very detailed evaluation can be written of every student. The resulting letters of recommendation are co-signed by both program directors.

Training Pre-Service Personnel To Teach the Severely Handicapped: Living With Reality

Any program that is designed to train people to do things, no matter how well it is conceptualized in the ivory tower, must function in the real world, i.e., it must respond to multiple pressures. Teacher training programs are no exception to this rule: any training program must respond (1) to the needs of the eventual consumers; (2) to the needs of the university of which the training program is a part; (3) to the needs of the cooperating agencies used as training facilities; (4) to the needs of the trainees; and (5) to the needs of the market-place. In this section, some fo the factors that have affected various components of the program will be discussed, as will the responses that have been made where it became necessary.

The Needs of the Eventual Consumers

Typically, as children go through school, they learn to observe the customs, laws, regulations, and rules of the society, and to develop some decision-making skills for obeying or disobeying them. In general, we assume that children will eventually become change agents for the society; in preparation for this, it is generally felt that a student's education should include an explanation of the contingencies and consequences involved in the making of decisions. In the end, the ultimate responsibility for most decisions remains with the student; if he is given the requisite

information, however, he should be able to make the appropriate moves at the appropriate times.

In contrast, severely handicapped individuals have been relegated to the bottom of the social heap and the society does not allow them to become change agents. Realistically, the most they can hope for is to be allowed to act as if they participated in society. They are normally seen as constituting a surplus population (Farber, 1968), and as a consequence, they are excluded from most of the societal rights, privileges, and responsibilities usually granted to people. Decision-making, for severely handicapped people, is grossly restricted: over the course of their education and beyond, most major decisions are made for them, including not only the decisions as to what they will be taught in school, but also as to what career options will be made available to them, to which social circles they can move, and what social roles they will be allowed to play. Realistically, severely handicapped people are tolerated only as long as they act "super-normal", and the more severe their handicapping condition(s), the less variance from the "normal" performance of customs, laws, regulations and rules they are allowed to exhibit. If they behave in a perfectly acceptable manner in every respect they will be tolerated rather well; with increasing deviation from the norms, however, there is increasing risk of a negative reaction from other people.

Our response to this, of course, has been to provide a program in which the students are trained to think in terms of human development and eventual independent functioning. It would be easy to think that this is enough, but unfortunately, such is not the case, because the "eventual

consumers" is not a group composed solely of the handicapped children and adults who will be taught by our graduates; it also includes the other members of the society in which they are found, i.e., the "normal" people who surround us. This is where the real problems are to be found, because the ideas and attitudes of the people in a society are all-important to those who would go out to work with the severely handicapped. One really difficult problem stems from the fact that the characteristics of a deviant population are often assigned to those who work with that population by those who are members of the mainstream. It has become very clear that teachers of the severely handicapped are often seen as being surplus members of the population whose ideosyncrasies are barely tolerated by those who run the schools.

Unfortunately for the children our teachers will serve, general educators rarely allow teachers of the severely handicapped to be change agents, or even to have a significant impact on the educational system. Undergraduate students going through a program such as ours are very enthusiastic and get a lot of environmental support while they are in the group. It is very likely, however, that when they leave the university, they will go to a single classroom out in the "boondocks." In such places, they are likely to experience an isolation that is not in keeping with their experiences as students. Those who go to very active educational centers for the retarded may not get this feeling because of the mutual support provided by the administration and staff of these centers, but such places are few and far between. Even in these situations, however, we find many of the same feelings and pressures that are found in the extra-school

community as a whole. It behooves the university training staff, therefore, to prepare the students for the worst so that those who do experience isolation will be ready when it comes. If they are not adequately prepared, it is quite possible that many of them will not last for very long when they get out into the field. When that happens, everyone's time will have been wasted; from our point of view, since time is one of our most precious commodities, this cannot be allowed to happen.

The Needs of the University

Being part of a surplus population is a fact of life for university faculty who train teachers of the severely handicapped as well. Our experience leads us to believe that programs such as ours will be tolerated as long as federal money is available. If this money were to be removed from the state departments of public instruction and the university departments of special education, there would probably be a re-evaluation of the need for the programs. The results would be disastrous, of course. A good example of what can happen is the fact that poverty (to use just one example) was once a subject of intense interest on all university campuses.

The notion that all of us are seen as having many of the attributes of a surplus population has ramifications in what we, the program staff, have to do while running a program to train preservice teachers. One problem that had to be faced stems from the cost of running a practicum-based program: it represents an expensive commodity in terms of resources and staff commitment. We have had to realize that, from a university-wide perspective, traditional arguments cannot be used to justify its continued existence. Standard criteria for such justification would

include: (1) cost efficiency; (2) numbers of students; and (3) productivity (fame) of the program. Given the need for specialized training and specialized resources such as special courses, low faculty-student ratios, etc., cost-effectiveness will always be low. Note, parenthetically, how similar this problem is to the problems faced by agencies serving the severely handicapped per se. Educators working with severely handicapped people always look bad when the "numbers game" is played. For preservice training programs, because the severely handicapped constitute a low-incidence population and not many jobs are available, it would be useless to try to turn out a lot of students each year. In addition, the small number of people in the field precludes our ever attaining a great deal of fame. An attempt was made to use moral-ethical-humanitarian arguments to justify the existence of the program, but these are almost useless when the economy of the university is depressed. There are needs and problems in all areas of education, and the humanitarian arguments are easily discounted: it is, after all, very difficult to justify allocation of money for the needs of the few at the expense of the needs of the majority. The only argumentative framework that seems to have any impact at all is the justification of the program from a civil rights perspective, i.e., regardless of the limitations of a person or the severity of the handicapping conditions that may be present, people qua people have rights and privileges. The severely handicapped have traditionally been excluded from the exercise of their rights, but recently the courts have been consistant in saying that resources should be allocated to them. The guidelines for the allocation of these resources are still unclear, though,

and it may well prove to be the case, in the final analysis, that continued support for any long-term programs for serving the handicapped will have to be left to the charisma and the ability to maintain political and public relations of the persons who run the programs. Again, note the similarity of this to the problems of the field programs that serve the severely handicapped directly.

There is another major problem faced by university faculty who wish to run programs of this nature. In developing the program, an implicit statement was made to the effect that existing procedures for training field personnel have not accomplished much in the training of preservice teachers of the severely handicapped. If they had, the establishment of a special program would have been unnecessary. In choosing to use a practicum-oriented approach, a statement was made about the need for first-hand teaching experience at a very intense level of involvement. This level of intensity is not necessary for preservice teachers of normal children who are seeking degrees within the mainstream of education. It is absolutely necessary for those in training to work with the severely handicapped, however. This is because undergraduates in general education have already had many (if not most) of the same experiences that their normal pupils will have, and will at least know when they are doing something correctly or incorrectly. The basis for this knowledge is developed through years of interactions with their teachers, parents, siblings, friends, and acquaintances. In addition, most of the faculty who train undergraduates to go out to work with normal children (i.e., almost everyone in schools of education) have also had the same experiences,

and are able to communicate techniques, methods, and potential problems along with their possible solutions quite easily without having to rely on much contact with real children to any great degree. For people who are going to work with the severely handicapped, however, even those with impeccable intentions and motivations, it is difficult to identify rationally with the needs of the individuals to be served. This is true not only for those who have had little or no contact with severely handicapped individuals, but also for those who have had previous volunteer or paid positions, and those who have had the experience of living with severely handicapped siblings or relatives (in fact, the emotional involvement found in the latter type of contact may provide the least rational basis for understanding). The simple fact-of-the-matter is that the experience of being a severely handicapped individual going through school is simply not in our repertoire. None of us know what it means to experience training for the severely handicapped from the point of view of one being trained, and all of our knowledge must come from observation. Flatly stated, we cannot pick up the knowledge of the developmental needs of the severely handicapped and techniques for modifying their environment from books or the spoken word. Although it may <u>sound</u> logical to say, for example, that the good teacher must observe the behavior of the child and establish instructional goals on the basis of what we observe, preservice teachers often hold unrealistic expectations for, say, severely, and profoundly retarded teenagers. After all, they <u>look</u> like teenagers, and we just do not expect them to function on the level of pre-school children. In the absence of a training program such as ours (and a number of other good ones around

the country), it typically takes a teacher two, three, or four years, and even longer to attain this understanding. Many teachers never do achieve it.

The practicum experiences in our program were structured so as to provide a means for establishing a foundation for gaining this understanding. The intensity of the experiences, their continuity, and the placement rotation all appear to be important variables in obtaining it. When we add to the practicum the specialized course work that is designed to facilitate the comprehension of the teaching task, the result is a non-traditional teacher-training program. From a university administrator's perspective, however, such a non-traditional program can cause confusion. We have had to confront some of the following questions as raised by administrators:

How can program requirements be reconciled with state certification requirements? State licensing requirements for teachers are usually quite lenient. This allows two or more universities to produce teachers certified for the same classrooms, while having quite different training backgrounds. This focus on minimal as opposed to adequate standards of teacher preparation creates pressure for the "watering down" of program requirements, especially in periods of resource contraction and retrenchment. Specifically, the way the question has been posed to us is to ask how we can produce the same product with less faculty involvement. Attempts to explain the problems this creates have not been entirely successful.

How will faculty/staff resources be allocated? Universities have traditionally given little weight to practicum and student teacher supervision activities. Such duties are usually passed off onto the lowest

ranking faculty members, or, if a way can be found to do it, onto graduate students in the form of duties that are connected with assistantships. The supervisors, seeing this work as having little or no reward within the university, are anxious to do the things that gain recognition, and will often try to pay as little attention to the work as they can get away with. But, if preservice teachers are to have good training in a practicum-based program, good practicum supervision is a must. This is tremendously time-consuming when it is done well. Any faculty member who is to engage in a practicum-based program must be willing to accept the fact that courseload credit will be far less than the actual work load, and that while a faculty member is out supervising students in the program, someone else will be freed up to crank out the publications that will get promotions and raises. If a similar program is run in a university that requires productivity in terms of publications for promotions, raises, and tenure, the logical course of action could well be to get someone else to supervise; if, however, one is to be adamant about the provision of good training, one could also be prepared to move at the end of six years.

Another poorly rewarded activity that is important in running a practicum-based program is on-site program administration. When working with several service agencies that are not part of the university, the faculty member must realize that, although he is not part of their power structures, he must make tremendous demands on their time and resources. To continue running a practicum that is structured to be as intense an experience as the one at Indiana, the lines of communication between the program director(s) and the cooperating facilities must be wide open and kept that way.

This requires a great deal of time and effort, yet the work is rarely recognized by the university administration for what it is. Again, course-load credit is minimal in relation to the actual work involved, and anyone intent on running a practicum-based program must be ready to field the problems that result.

It may be possible to find university administrators who are willing to support the effort actually involved in running such a program, and to give credit where credit is due. But again, given (1) the fact that the attributes of the "surplus population" will applied to those who work with the severely handicapped, at least to some degree, and (2) the fact that most university administrators have usually been involved in general education and do not understand the necessity for such intense experience on the part of the student, the prediction can be made that it will not be easy to find support for a similar program from within the university structure.

Where do we find trained faculty? How do program administrators plan courses and training experiences in which skills are required, but for which no faculty personnel exist to do the training? Universities have not generally been producing faculty types who are aware of what teachers of the severely handicapped need to learn, possibly because anyone working with the severely handicapped population is himself suspect. If a university is large enough, it may be possible to find adequately prepared personnel in other departments who are willing to teach undergraduates in the program. Even in large universities, however, the necessary people are few and far between. When they can be found, administrators in other departments

and schools also have their problems in finding enough people to do the existing jobs that have to be done, and may well be unwilling to free the time of their faculty for such a task. If these persons are freed to teach a course in the program, it will often be viewed as an overload.

There are solutions, of course. Flexibility in programming is a must. It may be necessary to cover some areas of training in non-traditional ways. Some possibilities would be to use workshops, two-credit hour courses, or a year-long course. But even this will not be enough, because many of the things that must be taught are simply not available in print or from existing university staff. Ancillary faculty who are currently teaching severely handicapped individuals can be invaluable when this is the case. Some universities will be lucky enough to have a very good teacher of a class of multiply handicapped children available to teach a course in methods for the multiply handicapped, for example. Where they can be found, they should be used. The only problem so be solved in a case like this is to find the money for salary remuneration for those people.

These are some of the problems we have experienced within the university that others are likely to experience. Posing alternate solutions to the problems is likely to wreak havoc with the university administrative structure because traditional teacher training molds must be broken. The lack of understanding in the part of those in general education requires a degree of faculty effort that should never be underestimated by those who would run a practicum-based training program. Sometimes the university administrators will require a degree of retraining. Having open lines of communication to the administrators in the field who must staff classrooms

for the severely handicapped and who understand the teacher training problems is helpful in this enterprise. Any school of education in a public university will respond to consumers of its products. Again, the time needed to set up the required communication network is tremendous, but it can pay off handsomely when the chips are down.

The Needs of the Cooperating Agencies That Serve as Practicum Sites

In its conceptualization, our program is an apprenticeship approach to training. There is a very heavy dependence upon the good efforts of the personnel in the practicum sites to expose our students to the many things that cannot be taught in the academic classroom, or the things that university faculty simply are not capable of offering. The benefits of such an approach are many. For one thing, practicum experience is a protective environment for the university student, i.e., the student can make mistakes and learn from them without having these mistakes result in disaster for the severely handicapped students. Errors in judgement and/or programming can quickly be rectified by those who are familiar with the situation and the university student is often the better for the experience. Benefits are not limited to teaching techniques, however; this is only a part of what a teacher must know. For example, a teacher must also know how to get along in the teacher's lounge, and how to be effective with the school administration if that person is to be truly effective as program manager. In the area of relations with the building administrator, for example, requests for program resources and the development of teaching innovations, etc., must be made through the appropriate channels; approval is granted only at the administrator's discretion. Trainees need to learn that a

teacher's requests will not always be granted, and that no matter how good the perceived benefits, support may simply not be forthcoming at times. In addition, too much pressure and/or bad timing of requests may actually prove to be counterproductive to good programs. Administrative procedures may change from one situation to another, but awareness of the fact that there are principles for working within a system can be best gained by doing it in the company of experienced professionals. Practicum seems to be very good at creating the climate for understanding how to be effective in this area. All-in-all, it is a very useful tool for teacher training.

Real problems can develop from the possibility that the practicum student can be seen as a burden by the agency in which he is placed. Classroom programs that include the student have to be devised by the personnel in the agency, and there is always the danger of personality and/or philosophical conflicts. The latter is always a very real possibility when the training program requires a great deal of commitment on the part of the student: anyone who pays the university to work twenty hours a week in the field in addition to carrying a full academic load must be fully committed. Students who are this involved often have strong ideas of their own as to what the education of the severely handicapped should be like, and sometimes these ideas will clash with those of the teachers and administrators of a facility. Nevertheless, by assigning students for an extended amount of time, a service is provided to the cooperating facility. Extra hands can broaden the program in a classroom and help make the teacher more effective. That is, it is not all a one-way street, and the practicum can work to the benefit of all concerned. However, it takes a lot of time to set it

up and the benefits for everyone may not be realized if great care is not taken from the beginning.

Developing and maintaining good practicum placements has several dimensions:

The agency as a training facility. If an agency has a good program, it's personnel realize that many useful techniques and methods that have not been documented can be learned by the student only as a result of first-hand observation. This realization can be developed into a strong committment to the need for training on the part of the agency, especially if the university faculty takes the time to try to understand the agency's program and its strengths. Recognition of good services by the official representative of the university can be a strong motivating factor in building a cooperative training venture between the university and a service facility.

The agency as a university partner. The agency that assumes part of the responsibility in the training of teachers must be seen as part of the university program; therefore, it must have a voice in the structuring of the program. The agency's input must be ongoing and continuous. A good vehicle for this can be a standing invitation to sit in on all meetings that deal with policy. The personnel in most agencies do not have the time for this degree of involvement, but at least regular meetings with the agency administration and personnel are imperative. The university personnel must respond to the agency's concerns and observations about the way the program is run.

In addition, the single most qualified person in the identification of a specific trainee's needs for training is the cooperating teacher in

whose classroom the student is carrying out a practicum experience. The teacher has the greatest amount of contact with the student in the place where it counts, and the teacher can provide a great deal of evaluative information about the student's strengths and weaknesses to the program staff. University faculty must pay attention to the classroom teacher. It is very useful to make it a point to stop in often to find out what she has to say.

Trainees as teacher aides. If the trainees become contributors to the classroom program, they will be more readily accepted by the agency. Committed students can make a significant contribution to the program of a service agency, and the university staff has an obligation to take the potential contribution of the student to a site into account when making practicum assignments. Prior coursework and practicum assignments can assist in the decisions of who to place where and at what time. Consultation with the agency at the time of the practicum placement decision is essential, and our experience indicates that the agency responds well to such an effort. Because on-site personnel come to know the students as well as the students come to know the on-site personnel (the grapevine works both ways), there are sometimes definite preferences and predjudices formed. An attempt to respond to this does indeed help things run smoothly.

Several problem areas have been identified in the establishment and maintainence of close relationships with practicum sites. Any practicum-based program must be aware of these in order to avoid the quagmire of irresolution that results from non-communication between the agency and the university.

Training goals vs. service goals. The university has the primary goal of training teachers, and the service agency has the primary goal of providing service to severely handicapped individuals. At times these goals will clash as when the students are taken on a field trip by a university instructor and the agency is left without the hands the student normally provides. Situations in which training and service clash are unavoidable if the program is to provide good training. Steps must be taken to minimize conflicts between service and training goals before the conflict occurs. Cooperation will be forthcoming if a serious attempt is made by the university personnel to minimize the problems that can arise. If the situations that will cause clashes are identified well in advance and attempts are made to prevent them from overwhelming the facility (e.g., plan the field trips well in advance, don't bunch them up, and let the facility know about them at the beginning of the semester), they can be handled easily.

Personality, role, and programming conflicts. It is up to the university personnel to establish the lines of communication that allow the staff of the service facility to call on them as soon as conflicts begin to arise. Most situations can be handled if they are identified early and immediate steps are taken to clear them up. The cooperating facility must know that it can get the attention of the program staff quickly, and that steps will be taken to remedy problem situations immediately. When this is procedurally established, the cooperating agency's staff will be very cooperative; if it is not, the agency may well be lost as a practicum site.

Priorities. Service agencies have different priorities from those of the university, and they have different administrative channels and resource limitations. If the differences are clearly understood by both the personnel on the agency's staff and those in the university, certain problems can be avoided. Some teachers, for example, would like to have two practicum students and a student teacher in the same room, and to have the same ones for the entire year, while other teachers feel that they would like to have only one practicum student for one eight week period during the course of an entire year. In each situations, it is clearly not possible to provide complete satisfaction because there are a finite number of students, and a finite number of practicum sites. Discussions with the agency personnel dealing with the problems faced by both the agency and the training program staff can have tremendous benefits for both groups. If everyone understands the problems faced by both the training program and the agency, it is our experience that the agency will try hard to make adjustments. Again, communication is the basis for the avoidance of problems. The agency personnel must know that the suggestions they make will be taken seriously, but that the university cannot implement all of them because of the limitations inherent in the university structure. Once this level of communication is reached, a myriad of problems dissapate.

Assignments to poor training sites. It is not practical to use a particular site only periodically. All sorts of negative responses from both students and personnel on the practicum site are generated by this action. Once a committment to a site has been made, even if it turns out to be a poor training site, it will have to be adhered to until a natural break in the routine comes. Ends of semesters or school years typically

are the best times to terminate a site. Note that there can be some justification in placing a student in a site in which poor service is being provided to the children or clients. Negative learning experiences can, paradoxically, be very good for some students because of the reality inherent in such situations and the need of some students to find out about them. In general, however, it is not a good practice to have many poor sites because of the importance of observation and participation with good teaching models.

These, then, are some of the problems uncovered in establishing and maintaining good relationships with practicum sites. Given the intensity of the practicum experiences, good relationships are of the utmost importance because, in the final analysis, university personnel are sorely in need of assistance in the training of pre-service teachers. Most classroom teachers know more about the day-to-day business of teaching severely handicapped people than any of us who have been out of the classroom for more than a year. We at Indiana University are and will remain deeply indebted to the efforts of the service agencies in the training of students. Any other program that attempts to run a similar set of experiences would be well-advised to do some preparation. It pays handsome dividends in the long run.

Needs of Students

The university has the obligation to find the best students possible for the training program, and to train them in the best way possible. Ultimately, our responsibility is to the severely handicapped individual who will be served by our students when they graduate. Because of the

tremendous vulnerability of these persons it may be more important for us to send out good people than it is for those who train teachers of the normal population.

A number of student problems develop when a program with the intensity of ours is structured for training. The students in our program generally show a higher level of committment than most undergraduates, or, as one student put it, "We never have time to be undergraduates." When faculty rob students of one facet of college life, they have an obligation to replace it with something that is worth at least as much if not more. For the students in this program, it has been the knowledge that, upon completion of their undergraduate degree, they will be trained to do a job at a level usually not attained by first-year teachers.

The problems we have experienced generally revolve around three sets of relationships: (1) those of students with each other; (2) those of students with faculty; and (3) those of students with themselves. In this section we will address ourselves to each of these.

Student-student relationships. A program such as ours requires the students to spend a great deal of time with each other. Not only do the students go to all of their classes as a group, but they also share practicum sites, i.e., the practicum site a student goes to for one eight-week period is the same one that another student will be at for the next eight-week period. Such a situation can be handled in many ways, and our method has been to try to take advantage of the situation through the building of group unity. The potential payoff is the attainment of a closely knit group that shares information, techniques, and methods of

structuring the environment for the betterment of program management. The problems we have encountered in this have all revolved around those students who are basically "loners." Isolation, even that which is self-imposed, causes all sorts of problems, ranging from feelings of inadequacy on the part of the isolated student, to resentment by the bulk of the group when an individual case requires special handling as a result of perceived unwillingness to go through the same experiences as everyone else. One solution to this is to try to exclude the "loner," but it is often difficult to detect them beforehand.

Student-faculty relationships. Some undergraduate students seem to want parent surrogates among the faculty. Some students seek this sort of relationship with a greater intensity than others, and if a special relationship is allowed to develop with one or more students, it will create divisions and resentment among the others. In such a situation, the ability to use the group as a teaching tool will be lessened: those who "succeed" will act differently from those who do not, and petty jealousies are likely to develop. It is far better for the faculty to clearly establish a professional relationship from the very beginning, and to expect to have only professional relationships with the students at all times. Such behavior will prevent a tremendous number of problems from ever arising because the students will tend to rise to their expectations.

Student relationships with themselves. Undergraduates seem to naturally fall into two groups: those who see themselves as doing a pretty good job and those who do not. The latter form a problem group, and one of the big jobs that any training program faces is to convince these students

that they are really very good teachers before they leave. If this can be done, and if the training program provides a good teaching model, then they will rise to their level of competence and develop beyond it. If it does not occur, the first year graduate may take a year or two to "get his or her feet on the ground" after leaving the program. One of the major tasks of the training staff, then, is to provide support for these students, especially in the spring of the year when exhaustion begins to take its toll. Students working as hard as ours get very tired.

Concluding Statement

These, then, are some of the problems we have encountered, and some of the solutions we have had to develop. In large part, the "solutions" are little more than the application of a good dose of "common sense." There is little new in this section, but the fact that it has taken this long to develop an awareness of the problems and the means of compensating for them probably indicates that others are having or will have many of the same problems. We have taken the time to write all of this down in the hopes that (1) we can help others to keep from having to reinvent the wheel, and (2) to spur others on to share their problems and solutions with us. The job is not yet complete; there are still many students to be trained and many problems to be faced. There are a number of programs "out there" that are struggling with the same issues and others that we have not yet identified. We would truly appreciate hearing from those who have something to share with us in the matter of training students to become teachers of the severely handicapped.

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Distinguished Achievement Award Entry

Indiana University School of Education
Undergraduate Program for Training Teachers of Moderately, Severely, and Profoundly Retarded Individuals

Submitted to the AACTE

Distinguished Achievement Awards Program

SUMMARY

Recent court decisions have resulted in legislation requiring the public schools to develop programs to serve all children regardless of degree or type of handicapping condition(s). This means: (1) many children with tremendous cognitive, physical, and social problems are now entering the schools for the first time; and (2) there is an obvious need to train teachers to meet their needs. Indiana University has the only undergraduate major in the nation known to exist specifically for the purpose of preparing teachers of the moderately, severely, and profoundly handicapped.

In this program, responsibility for teacher training is conceived as a partnership in which the university and various public and private service agencies cooperate. The university provides the academic coursework, trainee supervision, and administrative structure. The service agencies provide extensive on-the-job training, and formative program evaluation. Both make an input into the structure and maintenance of the program. Concentrated coursework dealing with methods and materials, behavioral assessment, behavioral control, and program management is interwoven with the day-to-day practicum assignments. The practicum requires 20 clock hours of contact with severely handicapped individuals during the junior year, and full-time contact for one semester of the senior year. The trainees are continuously monitored by program faculty and doctoral students who are in training as teacher trainers.

Entering its fourth year, program graduates maintain a very high employment record. Follow-up data indicate that graduates of the program are seen as highly competent professionals by the administrators who have hired them.

A. Description and Development of the Program

Five years ago the Department of Special Education at Indiana University made a commitment to the undergraduate preparation of teachers who would serve the moderately, severely, and profoundly retarded (here abbreviated "severely handicapped"). At that time, few training programs, and no undergraduate major programs designed specifically for this purpose were found. At present, Indiana University still appears to have the only program in the country for training undergraduates solely for the task of teaching severely handicapped individuals.

The first step in structuring the program was to meet with a group of experienced teachers of the severely handicapped who were seen as being "good teachers" by their administrators. These people were asked to specify what they would like to see in an undergraduate program if they themselves were about to enroll in it. This meeting was the beginning of the cooperative training venture shared by Indiana University and the direct services agencies that participate in the program.

The teachers insisted that experience was the key to good training. Future teachers of the severely handicapped have not had the experience of going through school as severely handicapped individuals. Consequently, they usually have little or no truly realistic idea of what to expect in terms of entry behaviors, rapidity of pupil progress, or ultimate goals. Typically, expectancies of new teachers are either too low or too high, and it often takes several years to develop a sense of realism for the task. Immersion into closely guided and monitored field experiences could hasten the process of developing adequate and realistic expectancies, it was argued, and so the program was structured to be practicum-based.

In the junior year, students in the program work in four different eight-week practicum placement sites. They spend 20 hours a week on-site for the

duration of each placement. The sites vary along the dimensions of age (infant through geriatric), functional level (moderately retarded through multiply handicapped profoundly retarded) and administrative arrangement (pre-school, public school, sheltered workshop and group home). Then, during the first semester of the senior year, the students spend sixteen weeks as student teachers in two different public school settings. Thus, over the course of the program, they go to six different eight-week placements in which they are given the equivalent of approximately one year of guided experience.

During the entire junior year and the second semester of the senior year, the students are given a block (4 semester hours) of academic coursework which is designed to supplement and organize the skills learned in the practicum. In addition to the introductory courses required by the University, the School of Education and the State, a series of methods courses is structured specifically for the students in the program. These courses deal with behavioral assessment and behavioral management, as well as with methods of first-language instruction, reading and math instruction, methods for teaching multiply handicapped individuals, and motor development assessment and instruction. The methods courses are taught not only by faculty from the Department of Special Education, but also by faculty from the Division of Curriculum and Instruction in the School of Education; the School of Health, Physical Education and Recreation; and by an adjunct instructor from the field.

The personnel from the cooperating field service agencies also play an active and important role in the program. Although their major role is to provide on-the-job training in day-to-day assessment and teaching activities, they also participate in (1) formative evaluation of the program structure; (2, evaluation of the students; and (3) the development and structuring of tasks assigned by the academic instructors to be carried out while on the practicum.

Conceptually, the cooperating teachers are seen as members of the teacher training program by the university personnel, and, in fact, also see themselves as such.

B. Objectives and Goals

The goals of the program are threefold:

1. To develop teachers who are individual program managers. The students in the program are taught to utilize the entire environment of the severely handicapped individual as an instructional tool. In doing so, the student learns that the teacher's major responsibilities are: (1) to carry out a program of assessment to decide what an individual must learn; (2) to teach the necessary behaviors or to find someone who can; (3) to determine when the instructional objectives have been reached; and (4) to develop new instructional objectives when the old ones have been attained. In doing all of this, the teacher assumes responsibility for seeing to it that a program of instruction is carried out for each individual in her class; i.e., the teacher is a manager of individual instructional programs and not simply a teacher of subject matters. This often requires help from other people in the environment. "Other people" would include not only those from the professional community, but also the non-professional community, e.g., a janitor, a local mechanic, or the parents might all be called upon to assist in carrying out a program of instruction.

2. The training of teacher trainers. Each year, several doctoral students become members of the Program Committee along with the regular faculty assigned to the program. Each member of the Program Committee is assigned practicum students and/or student teachers to supervise. The Program Committee meets as a group at least once each week to discuss (1) the progress of each student; (2) problems being experienced in the field and possible ways to approach solutions to these problems; (3) program structure and possible ways to

improve upon it; and (4) conceptual problems in teacher training. All members of the Program Committee are expected to attend and take an active part in meetings with field, university, or state level personnel that have a bearing on the program. Thus, for the doctoral students in the program, learning is by doing, just as it is for the undergraduates in the program.

3. The analysis of the task of teacher training. Because of the character of the program, a unique opportunity exists to research questions on the nature of teacher training and the problems experienced in running a practicum-based program. The intensity of the contact of university personnel with service agency personnel, severely handicapped children, and undergraduates in teacher training allows a great deal of inquiry to be carried out. It is expected that significant generalizations about teacher training will be derived from the inquiry activities of the program staff.

C. Personnel Involved

Program Staff

Richard B. Dever, Ph.D., Director, Associate Professor of Education

Dennis R. Knapczyk, Ph.D., Co-Director, Associate Professor of Education

Campus Faculty (Methods Courses)

Caroline Burke, Ed.D., Associate Professor of Education (Reading Methods)

Frank Lester, Ph.D., Assistant Professor of Education (Math Methods)

David Gallahue, Ed.D., Associate Professor of Physical Education (Motor Development)

Lee Stoner, Ph.D., Associate Professor of Education (Public School Structure)

Adjunct Faculty

Frances Bell, M.A., Teacher of the Multiply Handicapped (Methods for the Multiply Handicapped), Stone Belt Council for Retarded Citizens, Bloomington, Indiana

Doctoral Students

3-5 Doctoral students per year from the Department of Special Education

In addition to the above, approximately 40 teachers, sheltered workshop supervisors, group home managers, and service agency administrators are involved in the training of the undergraduates.

D. Annual Budget

Faculty Salaries (2 I.U. Full Time Equivalents; 1 adjunct faculty)	$35,000.00
Doctoral Student Assistantships	16,000.00
Travel (for student van to Columbus, IN, and student-teacher supervision)	2,800.00
TOTAL	$53,800.00

Of this total, $16,000 comes from external sources (HEW Doctoral Training Grant), and $37,800 comes from internal funding. With 39 students currently enrolled as either juniors or seniors, the program's individual student cost per year to the university is less then $1000.00 (exclusive of administrative overhead costs). This compares very favorably to other teacher training programs at Indiana University.

E. Contribution to the Improvement of Teacher Education

This program demonstrates that teacher education programs can respond directly to pressing needs of the public schools. By entering into a partnership on a matter that both university personnel and field service agency personnel see as vitally important, the Indiana University program has tapped into a tremendous resource. In doing so, the program is demonstrating not only the value of the input that field agencies can make, but also their willingness to be active members of the training team. In addition, the program is demonstrating

that, by becoming intensely involved with personnel in the field, the university faculty members develop an in-depth comprehension of the needs of the field. Generalizations developed as a result of this contact have had a direct bearing on the structure of the training program.

F. Evaluation Methods and Results

Two kinds of evaluations are used in the program. One is a formative evaluation in which students, teachers, and program staff are asked, several times each year, to compare the student experiences with their ideas about what should be happening. In addition, Program Committee supervisors observe the performance of the students on a weekly basis and identify specific program strengths and weaknesses which emerge over time. As a result of this ongoing process, a number of specific changes in both course content and the structure of the practicum have been made.

Summative evaluation focuses on the effects that the training program has upon professional performance. Each year, graduates of the program and their hiring administrators are asked to evaluate the program using work performance as a criterion. This is done using an instrument listing 25 competencies on which the performance of each student is rated on a scale of 1 (no ability) to 5 (mastery of the skill). Current data indicate that the graduates rate themselves with an average competency score of 3.95, and their hiring administrators gave them an average competency rating of 4.125. Written comments obtained from administrators who have hired program graduates during the course of followup evaluation indicate that those who graduate from the program leave as well-trained professionals. Comments such as, " . . . immediately obvious results . . .;" " . . . well prepared . . .;" " . . . obviously had excellent training . . .;" are common in the replies.

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November 16, 1976

Distinguished Achievement Awards
Program
American Association of Colleges
for Teacher Education
One Dupont Circle, Suite 610
Washington, D. C. 20036

Gentlemen:

Find enclosed Indiana University's School of Education entry for an AACTE Distinguished Achievement Award. This entry consists of (1) a summary, and (2) a comprehensive explanation.

Sincerely,

Richard P. Gousha
Dean

RPG:gh

Enclosures